

CLAIMS

We claim:

1. A vehicle position detector device, comprises:

5 A GPS module for receiving and processing the GPS satellite signal, used to receive the satellite position information;

Two groups of velocity sensitive elements, for sensing the moving velocity of the left and right side wheels or other moving mechanism of the vehicle;

10 A calculation unit, for calculating the vehicle moving velocity, direction and position coordinate, comparing the GPS position information with the calculation results, eliminating the invalid data, and providing the correct and effective vehicle position information;

15 A communication interface, for transmitting the vehicle position information processed by the calculation unit to the position information display device or the vehicle navigation system.

2. The vehicle position detector device according to Claim 1, characterized in that each group of the said velocity sensitive elements comprises two or more inductive point elements for increasing the measurement precision.

20 3. The vehicle position detector device according to Claim 1, characterized in that at least one group in the said two groups of velocity sensitive elements comprises two sensitive elements for judging the wheel turning direction.

4. The vehicle position detector device according to Claim 2, characterized in that at least one group in the said velocity sensitive elements comprises two sensitive elements for judging the wheel turning direction.

25 5. The vehicle position detector device according to one of Claims 1 to 4, characterized in that the said calculation unit is combined into the GPS module, and a modularized vehicle position detector device is thus formed.

6. A method of confirming the moving vehicle current position, comprising the following steps:

Sensing the velocity of both sides of the vehicle; calculating the vehicle moving velocity and the azimuth angle variation in the moving direction; calculating the current vehicle position coordinate and azimuth; comparing the position data obtained from GPS measurement with the calculation result, eliminating the
5 invalid data caused by the blocked or interfered GPS signal and the accumulated error of the calculation result to obtain the correct and effective vehicle position information.